

WHAT IS CLAIMED IS:

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1. A method of connecting a mobile station with a base station via a radio link in a mobile communication system including a first base station capable of directional beam signal transmission and reception and a second base station incapable of directional beam signal transmission and reception, the method comprising the step of:
preferentially connecting the mobile station to the first base station rather than to the second base station.

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2. The method as claimed in claim 1, wherein the step of preferentially connecting the mobile station to the first base station includes a step of:

setting different handover threshold values for connecting and disconnecting the mobile station with the first base station and the second station, respectively, when the mobile station undergoes handover.

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3. The method as claimed in claim 1,

wherein the step of preferentially connecting the mobile station to the first base station includes a step of:

setting different threshold values for
5 connecting and disconnecting the mobile station with
the first base station and the second station,
respectively, when the mobile station is on standby
and switches a connection destination thereof.

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4. A radio network controller for
controlling a radio link connection between a mobile
15 station and a base station in a mobile communication
system including a first base station capable of
directional beam signal transmission and reception
and a second base station incapable of directional
beam signal transmission and reception, the radio
20 network controller comprising:

a base station connection control unit
configured to preferentially connect the mobile
station to the first base station rather than to the
second base station.

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5. The radio network controller as
30 claimed in claim 4, wherein
the base station connection control unit
sets different handover threshold values for
connecting and disconnecting the mobile station with

the first base station and the second station,
respectively.

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6. The radio network controller as
claimed in claim 5, wherein

the handover threshold value is defined as
10 an absolute value of a difference between power of
signals from a handover source base station and
power of signals from a handover destination base
station, and

the handover threshold value for
15 connecting the mobile station with the first base
station is larger than the handover threshold value
for connecting the mobile station with the second
base station,

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7. The radio network controller as
claimed in claim 5, wherein

25 the handover threshold value is defined as
an absolute value of a difference between power of
signals from a handover source base station and
power of signals from a handover destination base
station, and

30 the handover threshold value for
disconnecting the mobile station and the first base
station is larger than the handover threshold value
for disconnecting the mobile station and the second

base station.

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8. A mobile station in a mobile communication system including a first base station capable of directional beam signal transmission and reception and a second base station incapable of 10 directional beam signal transmission and reception, the mobile station comprising:

a base station connection unit configured to preferentially connect the mobile station to the first base station rather than to the second base 15 station.

20 9. The mobile station as claimed in claim 8, wherein

the base station connection unit sets different threshold values for connecting and disconnecting the mobile station with the first base 25 station and the second station, respectively, when the mobile station is on standby and switches a connection destination thereof.

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10. The mobile station as claimed in claim 9, wherein

the threshold value is defined as an absolute value of a difference between power of signals from a switching source base station and power of signals from a switching destination base station, and

the threshold value for switching to the first base station is smaller than the threshold value for switching to the second base station.

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11. The mobile station as claimed in claim 9, wherein

15 the threshold value is defined as an absolute value of a difference between power of signals from a switching source base station and power of signals from a switching destination base station, and

20 the threshold value for switching from the first base station is larger than the threshold value for switching from the second base station.

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12. The mobile station as claimed in claim 8, further comprising:

30 a base station determination unit configured to identify and distinguish the first base station from the second base station.

13. The mobile station as claimed in
claim 9, further comprising:

5 a threshold value receiver configured to
receive the threshold values.